

~~This application is a divisional application of application serial number 10/260,552 filed on October 1, 2002.~~

**A GAS FIRED RADIANT HEATING UNIT AND
METHOD OF OPERATION THEREOF**

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BACKGROUND OF THE INVENTION

FIELD OF INVENTION

This application is a divisional application of application serial number 10/260,552 filed on October 1, 2002.

10 This invention relates to an improved radiant heating unit and to an improved method of operation thereof. More particularly, this invention relates to a gas powered radiant heating unit that can be used with roadway surface reconditioning machines to heat various surfaces, including asphalt over a relatively large area.

15 **DESCRIPTION OF THE PRIOR ART**

It is known to have radiant heating units for use in repairing asphalt roadway surfaces. The units can be used with a scarifier or patcher. Most units are powered by low pressure propane gas. A radiant heating unit is described in U.S. Patent No. 5,218,952 issued to Neufeldt on June 15,
20 1993. The Neufeldt patent describes a radiant heating unit having a housing with a layer of ceramic fiber sandwiched between two layers of mesh. The heating unit described in the Neufeldt patent works well and is designed to withstand rough treatment. However, due to the extreme temperature conditions under which the heating unit operates, the mesh
25 can fail or the ceramic fiber can become damaged. When this occurs, the housing portion of the unit must be returned to the manufacturer for refurbishing. The manufacturer then removes the old layers and replaces them with a new layer of ceramic fiber sandwiched between two new layers of mesh. This procedure takes approximately five to six hours for
30 the manufacturer to complete, but the downtime for the unit to the user can easily be one to two weeks.